Groundwater Protection in Indiana

- Federal Clean Water Act
- For surface water:
    - water quality standards
    - water quality monitoring strategy
    - designation of impaired waterbodies
    - TMDLs
    - NPDES permits
    - NonPoint Source Management Plan
- Federal Clean Air Act
    - air quality standards
    - air quality monitoring
    - nonattainment areas
    - state implementation plan
    - Title V permits and control technology rules
    - national standards for vehicles, fuels etc.
- NO federal counterpart to Clean Water Act or Clean Air Act
- NO uniform national standards for groundwater
- NO consistent approach from one state to another for groundwater protection
- MANY programs in place to protect or cleanup groundwater:
    - Wellhead Protection Program (Safe Drinking Water Act)
    - Land and Groundwater Remediation Programs
        - Superfund
        - State Cleanup
        - RCRA Corrective Action
        - Voluntary Remedation Program
        - Leaking Underground Storage Tank Program
        - Oil Pollution Control Act
        - SMCRA
    - State and Federal Landfill Regulations
    - RCRA (hazardous waste management system)
    - Land Application Regulations
    - Confined Feeding Law and Rules
    - Septic System Requirements
    - Storage Tank Requirements
    - Pesticide Application Requirements
    - Coal Mining and Oil/Gas Requirements
    - IDEM Office of Land Quality and Groundwater Section
    - State Chemist's Office
    - Department of Natural Resources
    - State/Local Department of Health
    - State Fire Marshall's Office

In 1989, Legislature passed Groundwater Protection Act

- Did not set up analogous system to Clean Water Act or Clean Air Act
- The Act sets goals and fills some gaps:
    - uniform statewide science based standards
    - uniform statewide groundwater classification and management system

The Statute

- Water Pollution Control Board shall adopt standards, IC 13-18-17-5
- Agencies must adopt rules to apply the standards to activities they regulate
- Standards must include:
    - Numeric and narrative criteria
    - Classification System

    - Method for Applying Standards
- Standards must allow ground water remediations consistent with the objectives in IC 13-25-5-8.5
- When adopted, the agencies shall use the standards for the following:
    - Establish minimum compliance levels for ground water monitoring at regulated facilities
    - Ban the discharge of effluent to potable ground water
    - Establish health protective goals for untreated ground water used as drinking water
    - Establish concentration limits for ambient ground water
- Does not authorize an immediate system to regulate any person who may contribute to an increase in ground water concentration
- Does not override state's ground water remediation statutes and policies
- Does not override state/federal laws on coal mines
- Is to be implemented in the future through 5 Agencies' rulemakings
- Is not entirely analogous to surface or air quality standards

Key Elements of the Standards

- Applicability
- Classification System
- Criteria
- Ground Water Management Zone

Public Process

- Ground Water Task Force
- Topic at 20 Task Force meetings since 1997
- Subgroups of GWTF (Large and Small Workgroups) - activity since 1997:
    - 15-50 Stakeholders
    - Over 40 Public Meetings
    - Discussion of key issues
    - Development of rule language
- Individual meetings with interested persons
    - Discussion of key issues
- Comment Periods and Hearings

Changes Since Preliminary Adoption

- Applicability
    - Clarifies that standards, consistent with statute, are not immediately enforceable except at wells
    - Provides direction to the 5 agencies when adopting rules to govern activities that may impact ground water
- Numeric and narrative standards apply at all public/private wells immediately
- Prevention - the 5 agencies must minimize or eliminate to the extent feasible adverse impacts to ground water
- Additional considerations for ground water classification and related criteria for:
    - Agriculture
    - Coal
    - Remediations

If Standards Adopted:

- Immediately sets enforceable numeric and narrative standards for public/private drinking water wells and other beneficial use wells
- Provides clear direction to the 5 agencies on standards for incorporation into subsequent rule makings
- Requires agencies to "eliminate or minimize" to the extent feasible adverse impacts to ground water

Issues Raised By Citizen Groups

- Applicability - Standards should apply at all locations and at all times
- Prevention - Standards should require application of preventative action levels
- Ground Water Management Zone - Standards should specify a more restrictive zone
- Classification - Place more restrictions on the ability to reclassify ground water to the "Impaired Drinking Water" and "Limited" Classes

- Coal Mining - Add additional requirements for ground water in areas where mining has taken place and the bond has been released

Regulated Community Concerns

- Applicability - Standards should not apply immediately at all times and at all locations per the statute
- Remediation - Standards should ensure they allow for ground water remediations consistent with state/federal laws
- Clarity - Standards should provide a clear framework for agencies and regulated facilities to follow
- Flexibility - Standards should not dictate a specific one size fits all approach to protect ground water
- Prevention - Standards should not include or should not be prescriptive on prevention approaches

Use Of The Standards

- Examples of activities where the standards will be used:
    - Well Investigations
    - Septic Systems
    - Coal Mining
    - Surface Impoundments
    - Pesticide/Fertilizer Application
    - Landfills
    - Land Application
    - Constructed Wetlands

Misunderstandings of the rule:

- Legalizes contamination of a well
- Mandates a 300 foot ‘management zone’
- Authorizes risk-based cleanup of contaminated groundwater
- Allows, through risk-based cleanups, contamination of ground water that is not currently being used
- Exempts ‘unregulated’ activities
- Allows contamination of small rural aquifers
- Allows coal mining to damage ground water in un-mined property

Other Issues

- Comparison to Surface Water Quality Standards
- Comparison to Air Quality Standards
- Comparison to Ground Water approaches in other states

Consensus Issues

- Numeric/narrative groundwater standards:
    - few comments or concerns raised with the actual groundwater standards
    - no stated objections to immediate application of numeric standards to private/public drinking water wells and other beneficial use wells
    - no objections to obligation of state agencies in future to rely upon standards in regulating activities

Where do we go from here?

- IDEM and others use standards to conduct investigations at wells
- Five Agencies use standards to guide future rulemakings
- IDEM and Ground Water Task Force monitor implementation and recommend any needed changes